

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ORDER NO. R9-2004-0223

WASTE DISCHARGE REQUIREMENTS
FOR
LEUCADIA WASTEWATER DISTRICT
FOREST R. GAFNER WATER RECLAMATION PLANT
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On May 21, 1979, this Regional Board adopted Order No. 79-35, "Waste Discharge Requirements for Leucadia County Water District (LCWD), Forest R. Gafner Water Reclamation Plant (FRGWRP), San Diego County." Order No. 79-35 and addenda thereto established requirements for the disposal of reclaimed water to the La Costa Golf Course, which is located within the Batiquitos (4.51) Hydrologic Subarea (HSA) between El Camino Real and Highway 78. Addendum No. 1 to Order No. 79-35 specifically excepted the La Costa Golf Course reclaimed water storage pond from the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) requirement that all waste treatment, containment, and disposal facilities be protected against a 100-year, 24-hour storm and a 100-year frequency peak stream flow event.
2. On May 4, 1987, this Regional Board adopted Order No. 87-82, "Waste Discharge Requirements for Leucadia County Water District Forest R. Gafner Water Reclamation Plant, San Diego County." Order No. 87-82 superseded Order No. 79-35 and authorized the disposal of up to 0.75 millions gallons per day (MGD) of reclaimed water to the La Costa Golf Course. Addendum No. 1 to Order No. 87-82 authorized the LCWD to supply up to 0.75 MGD of reclaimed water to the Carlsbad Municipal Water District (CMWD) for distribution within portions of the Carlsbad Hydrologic Unit (HU) (904.00) in the following Hydrologic Areas (HA) and Subareas (HSA):
 - a. Buena Vista Creek (4.20) HA, El Salto (4.21) HSA within the City of Carlsbad;
 - b. Agua Hedionda (4.30) HA, Los Monos (4.31) HSA within the City of Carlsbad;
 - c. Encinas (4.40) HA within the City of Carlsbad;
 - d. San Marcos (4.50) HA, Batiquitos (4.51) HSA within the City of Carlsbad; and
 - e. San Marcos (4.50) HA, Richland (4.52) HSA.
3. On December 20, 1993, this Regional Board adopted Order No. 93-41, "Waste Discharge Requirements for Leucadia County Water District Forest R. Gafner

Water Reclamation Plant, San Diego County.” Order No. 93-41 superseded Order No. 87-82 and authorized the LCWD to supply up to 0.75 MGD of reclaimed water to the CMWD for distribution within the portions of the Carlsbad HU (904.00) listed in Finding No. 2. Addendum No. 1 to Order No. 93-41, adopted on October 10, 2001, increased the maximum allowable flow rate from 0.75 MGD to 1.0 MGD.

4. In order to substantiate that the intermittent overflow of the La Costa Golf Course reclaimed water storage pond does not impact surface water quality, Order 93-41 required regular monitoring of surface water and intense monitoring during any overflow event. In addition, Order 93-41 required the LCWD to implement appropriate and reasonable measures to prevent discharge of reclaimed water into San Marcos Creek or Batiquitos Lagoon, including termination of the discharge to the storage pond when there is a potential for overflow.

The surface water monitoring program mandated by Order No. 93-41 requires monthly monitoring from November through March for flow, total dissolved solids (TDS), and total hardness (a measure of the sum of calcium and magnesium concentrations expressed as calcium carbonate) 250 feet upstream of the reclaimed water storage reservoir, 250 feet downstream, and at a point where first contact would occur with San Marcos Creek in a flood event. No significant effect of the use or storage of reclaimed water at the La Costa Golf Course on water quality in San Marcos Creek has been observed. According to reports from the LCWD, since issuance of Order No. 93-41, San Marcos Creek overflowed its banks and caused commingling of water in the reclaimed water storage pond with the creek on two occasions, January 5 and 12, 1995. On both days the creek waters receded the same day as the flooding. Monitoring data collected on both days at the points described above did not provide any conclusive evidence that the flooding degraded water quality in San Marcos Creek.

5. On May 20, 1991, this Regional Board adopted Order No. 91-60, “Water Reclamation Requirements for the Purveyance of Reclaimed Water for the Carlsbad Municipal Water District, San Diego County.” Order No. 91-60 authorized the CMWD to purvey water from the LCWD FRGWRP, Buena Sanitary District Shadowridge Water Reclamation Plant, and Vallecitos Water District Medowlark Water Reclamation Plant to areas within portions of the Carlsbad HU (904.00).
6. On December 16, 1998, this Regional Board adopted Order No. 98-200, “Master Reclamation Permit for the Carlsbad Municipal Water District, San Diego County.” Order No. 98-200 superseded Order No. 91-60 and authorized the CMWD to purvey reclaimed water to areas within portions of the Carlsbad HU (904.00).

7. On December 12, 2001, this Regional Board adopted Order No. 2001-352, "Master Reclamation Permit with Waste Discharge Requirements for the Production and Purveyance of Reclaimed Water for the Carlsbad Municipal Water District Carlsbad Water Recycling Facility, San Diego County." Order No. 2001-352 superseded Order No. 98-200 and authorizes the CMWD to produce and purvey reclaimed water to areas within the Carlsbad HU (904.00). Reclaimed water produced at the FRGWRP and delivered to the CMWD for purveyance is currently subject to the requirements of Order No. 2001-352.
8. On April 2, 2003, the LCWD changed its name to the Leucadia Wastewater District (LWD).
9. By letter dated April 13, 2004, the LWD was notified that the Regional Board was in the process of reviewing Order No. 93-41 as part of the Regional Board's permit update program. This Order incorporates updated information submitted by the discharger and other information obtained by Regional Board staff during the update process.
10. At the request of the LWD, this Order only authorizes distribution of reclaimed water produced at the FRGWRP to the La Costa Golf Course, which is located within the Batiquitos (4.51) HSA between El Camino Real and Highway 78. Distribution of recycled water to other areas in the Carlsbad HU (904.00) previously authorized by Order No. 93-41 and Order No. 2001-352 is prohibited.
11. The LWD owns and operates the Encina Effluent Pump Station (EEPS), located at the Encina Wastewater Authority's Encina Water Pollution Control Facility (EWPCF). The EEPS diverts secondary effluent wastewater from the EWPCF upstream of the Encina Ocean Outfall. From the EEPS, the diverted wastewater is sent through the LWD Gafner Land Outfall, approximately 28,220 feet long (5.34 miles), to the FRGWRP. In order to minimize spills, an alarm point in the FRGWRP control system constantly compares flow meter readings at both ends of the Gafner Land Outfall and automatically shuts down the EEPS whenever a significant disparity in flow rates occur.
12. The FRGWRP is located at 1960 La Costa Avenue, adjacent to San Marcos Creek and immediately upstream of Batiquitos Lagoon. The facility has only tertiary processes consisting of coagulant chemical addition, flocculation, clarification, filtration, and chlorine disinfection. Any reclaimed water that is undeliverable or fails to meet Title 22 standards is automatically diverted to the sanitary sewer for treatment at the EWPCF. The FRGWRP no longer has the capability to discharge directly to the Encina Ocean Outfall.

13. This Regional Board, acting in accordance with Section 13244 of the California Water Code, adopted the Water Quality Control Plan for the San Diego Basin (9), (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was approved by the State Water Resources Control Board (SWRCB) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Board and approved by the SWRCB. The Basin Plan contains beneficial uses, water quality objectives and waste discharge prohibitions.
14. Table 2-2 of the Basin Plan lists the following beneficial uses for San Marcos Creek and Encinitas Creek, surface waters within the Batiquitos (4.51) HSA:
 - a. Agricultural Supply
 - b. Contact Water Recreation
 - c. Non-contact Water Recreation
 - d. Warm Freshwater Habitat
 - e. Wildlife Habitat
15. Table 2-3 of the Basin Plan lists the following beneficial uses for Batiquitos Lagoon, coastal water within the Batiquitos (4.51) HSA:
 - a. Contact Water Recreation
 - b. Non-contact Water Recreation
 - c. Preservation of Biological Habitats of Special Significance
 - d. Estuarine Habitat
 - e. Wildlife Habitat
 - f. Rare, Threatened, or Endangered Species Habitat
 - g. Marine Habitat
 - h. Migration of Aquatic Organisms
16. Table 2-5 of the Basin Plan lists the following potential beneficial uses for groundwater within the Batiquitos (4.51) HSA:
 - a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Process Supply

However, Note 7 of Table 2-5 states that the beneficial uses do not apply for the area of the Batiquitos HSA (between El Camino Real and Highway 78) within which the La Costa Golf Course is located.

17. Tables 3-2 and 3-3 of the Basin Plan list the following water quality objectives for the Batiquitos (4.51) HSA (note that the groundwater quality objectives listed do not apply to the portion of the Batiquitos (4.51) HSA between Highway 78 and El Camino Real, within which the La Costa Golf Course is located):

Basin Plan Water Quality Objectives for Batiquitos (4.51) HSA		
CONSTITUENT	Concentration not to be exceeded more than 10% of the time during any one year period (mg/l or as noted)	
	Inland Surface Water	Groundwater⁴
Total Dissolved Solids	500	3500
Chloride	250	800
Sulfate	250	500
Percent Sodium	60%	60%
Nitrate (as NO ₃)	---	45
Nitrogen and Phosphorus	see note 3	---
Iron	0.3	0.3
Manganese	0.05	0.05
Methylene Blue Active Substances	0.5	0.5
Boron	0.5	2.0
Odor	None	None
Turbidity	20 NTU	5 NTU
Color	20 units	15 units
Fluoride	1.0	1.0

Notes:

1. mg/l = milligrams per liter
2. NTU = Nephelometric turbidity units
3. Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorous (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorous are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.
4. The water quality objectives do not apply to hydrologic subareas 4.51 and 4.52 between Highway 78 and El Camino Real and to all lands which drain to Moonlight Creek and Encinitas Creek. The objectives for the remainder of the Hydrologic Areas are as shown.

18. A discharge in compliance with this Order will be consistent with the standards, policies, and regulations established in the Basin Plan for the achievement of water quality objectives.
19. In establishing the requirements contained herein the Regional Board considered factors including, but not limited to, the following:
- a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose,

- b. Other waste discharges,
 - c. The need to prevent nuisance,
 - d. Past, present, and probable future beneficial uses of the hydrologic subunits under consideration,
 - e. Environmental characteristics of the hydrologic subunits under consideration, including the quality of water thereto,
 - f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area,
 - g. Economic considerations,
 - h. The need for developing housing within the region, and
 - i. The need to develop and use recycled water.
20. The proposed project will make use of recycled water consistent with the goals of California Water Code, Division 7, Chapter 7, Water Recycling Law.
21. In accordance with the Memorandum Of Agreement Between The Department Of Health Services And The State Water Resources Control Board On Use Of Reclaimed Water, this Order incorporates any conditions of approval submitted as part of the State DHS recommendations into water reclamation requirements proposed for adoption by this Regional Board.
22. This Regional Board has considered all water resource related environmental factors associated with the proposed discharge of waste from the FRGWRP.
23. The FRGWRP is an existing facility and this re-issuance of waste discharge requirements allows negligible or no expansion of existing uses; therefore, this Order is categorically exempt from the requirements of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Title 14, Division 6, Chapter 3, Article 19, Section 15301 of the California Code of Regulations.
24. This Regional Board has notified the LWD and all known interested parties of the intent to prescribe master reclamation permit requirements for the discharge described in the Findings of this Order.
25. This Regional Board in a public meeting has heard and considered all comments pertaining to the proposed discharge of waste from the FRGWRP.

IT IS HEREBY ORDERED THAT, the LWD, in order to meet the provisions contained in Division 7 of the California Water Code and Regulations adopted thereunder, shall comply with the following requirements for FRGWRP:

A. PROHIBITIONS

1. Discharges of waste to lands which have not been specifically described in the findings and for which valid waste discharge requirements are not in force are prohibited.
2. The discharge of waste in a manner other than as described in the findings of this Order is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed change.
3. Compliance with the Waste Discharge Prohibitions, as stated in the 1994 Basin Plan (Attachment 1), is required as a condition of this Order.
4. The discharge of wastewater shall not cause, wholly or in combination with any other discharge(s), this Regional Board's objectives for the ground or surface waters of the Carlsbad HU (904.00), as established in the Basin Plan, to be exceeded.
5. Neither the treatment, storage nor disposal of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
6. The discharge of a 30-day average treated wastewater flow volume for irrigation in excess of 1.0 MGD is prohibited unless the discharger obtains revised waste discharge requirements for the proposed increased flow.

B. DISCHARGE SPECIFICATIONS

1. Effluent used for landscape irrigation purposes shall be treated to the most restricted level in conformance with all applicable provisions of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria) for landscaping irrigation [currently Section 60304 (a) and 60320.5].
2. The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which

analyses have been completed and the number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30 day period. No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.

3. Turbidity concentration of the recycled water effluent from the FRGWRP shall not exceed a 24-hour average value of 2 NTU (nephelometric turbidity units), shall not exceed 5 NTU more than 5% of the time during a 24-hour period, and shall not exceed 10 NTU at any time.

C. RECYCLED WATER PURVEYANCE REQUIREMENTS

1. If the LWD begins purveyance of reclaimed water directly to parties other than itself (for onsite use only) or the CMWD, the LWD shall be considered a Recycled Water Agency and shall be subject to the provisions of this section. The LWD shall notify the Regional Board 120 days prior to commencement of the purveyance of reclaimed water directly to parties other than the CMWD.
2. The Recycling Water Agency shall establish new Regional Board, State DHS and the San Diego County Department of Environmental Health (County DEH) approved *Rules and Regulations for Recycled Water Users* governing the design and construction of recycled water use facilities and the use of recycled water. The Recycled Water Agency shall ensure that the rules and regulations are implemented and enforced with respect to the recycled water users. The Recycled Water Agency shall certify prior to the commencement of purveyance, that the Recycled Water Agency's *Rules and Regulations for Recycled Water Users* are consistent with the requirements contained in Attachment No. 2 of this Order.
3. The Recycled Water Agency shall certify, prior to commencement of purveyance, that it has developed and submitted for approval a program to conduct compliance inspections of recycled water reuse sites to the Regional Board, State DHS and County DEH. Inspections shall determine the status of compliance with the Recycled Water Agency's approved rules and regulations for recycled water users.
4. The Recycled Water Agency shall certify, prior to commencement of purveyance, that the following information has been developed and is available to the State DHS and the County DEH, for all current recycled water use areas:
 - a. The number, location, and type of facilities within the use area

- proposing to use domestic and recycled water. "Facility" means any type of building or structure, or defined area of specific public use that utilizes or proposes to utilize a dual plumbed system.
- b. The average number of persons estimated to be served by each facility on a daily basis.
 - c. The specific boundaries of the proposed use site area including a map showing the location of each facility, drinking water fountain and impoundment to be served.
 - d. The person or persons responsible for operation of the recycled water system at each use area.
 - e. The specific use to be made of the recycled water at each use area.
 - f. The methods to be used by the Recycled Water Agency to assure that the installation and operation of the recycled system will not result in cross connections between the recycled water piping system and the potable water piping system. This shall include a description of pressure, dye or other test methods to be used to test the system.
 - g. Plans and specifications shall include the following and shall be submitted to the State DHS and County DEH for approval:
 - (1) Proposed piping system to be used,
 - (2) Pipe locations of both the recycled and potable systems,
 - (3) Type and location of the outlets and plumbing fixtures that will be accessible to the public,
 - (4) The methods and devices to be used to prevent backflow of recycled water into the public water system,
 - (5) Plan notes relating to recycled water specific installation and use requirements.
5. The Recycled Water Agency shall do the following for all reuse sites:
- a. Enforce recycled water rules and regulations,
 - b. Conduct recycled water reuse site compliance inspections in accordance with the program submitted in compliance with *Recycled Water Purveyance Requirements C.3* of this Order,
 - c. Notify the State DHS and the County DEH of any incidence of recycled water backflow into the potable water system as soon as possible, but in no case later than 24 hours of finding the incident, and

- d. Maintain a current list of all on-site recycled water supervisors.
6. Prior to providing recycled water to a dual plumbed system as defined in Title 22, Chapter 3, Article 1, of the California Code of Regulations, the Recycled Water Agency shall obtain an amendment to this Order.
7. Recycled water shall not be supplied to parties who use, transport, or store such water in a manner which causes a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.

D. FACILITY DESIGN AND OPERATION SPECIFICATIONS

1. PROPER OPERATION

The LWD shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the LWD to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.

2. WET WEATHER STORAGE

The discharger shall provide adequate storage facilities to contain recycled water, or have in place alternate recycled water disposal methods approved by the Regional Board, during and after periods of rainfall when disposal by irrigation cannot be successfully practiced and to prevent the discharge of treated or untreated recycled water to any surface water body.

3. COAGULATION ALTERNATIVE

Coagulation need not be used as part of the treatment process provided that the filter effluent turbidity does not exceed 2 NTU, the turbidity of the influent to the filters is continuously measured, the influent turbidity does not exceed 5 NTU for more than 15 minutes and never exceeds 10 NTU, and that there is capability to automatically activate chemical addition or divert wastewater should the turbidity of the influent to the filters exceed 5 NTU for more than 15 minutes.

4. DISINFECTION PROCESS

Disinfection of recycled water shall comply with all requirements of California Code of Regulations, Title 22, Division 4. Disinfection may be accomplished by either:

- a. A chlorine disinfection process that provides a CT (chlorine concentration times modal contact time) value of not less than 450 mg-min/liter at all times with a modal chlorine contact time of at least 90 minutes based on peak dry weather design flow; or
- b. A disinfection process, that, when combined with the filtration process, has been demonstrated to reduce the concentration of plaque-forming units of F-specific bacteriophage MS2, or polio virus, per unit volume of water in the wastewater to one hundred thousandths (1/100,000) of the initial concentration in the filter influent throughout the range of qualities of wastewater that will occur during the recycling process. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

5. OPERATION MANUAL

A copy of the facility operations manual shall be maintained at the FRGWRP and shall be available to operation personnel and Regional Board staff upon request at all times. The following portions of the operations manual shall be posted at the treatment plant as a quick reference for treatment plant operators:

- a. Alarm set points for secondary turbidity, tertiary turbidity and chlorine residual.
- b. Levels at which flow will be diverted for secondary turbidity, tertiary turbidity and chlorine residual.
- c. When to divert flow for high daily and weekly median total coliform.
- d. When the authorities (State DHS, County DEH, Regional Board) will be notified of a diversion.
- e. Names and numbers of those authorities to be notified in case of a diversion.
- f. Frequency of calibration for turbidimeters and chlorine residual analyzers.

6. OPERATORS CERTIFICATION

The LWD's wastewater treatment facilities shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Division 3, Chapter 26, Title 23 of the California Code of Regulations.

7. RUNOFF AND FLOOD PROTECTION

- a. The discharge to any landscape impoundment, including the La Costa Golf Course storage pond, shall be terminated whenever rainfall or flooding is likely to cause the impoundment to overflow.
- b. All waste treatment, storage and purveyance facilities, with the exception of irrigation areas and the La Costa Golf Course storage pond, shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.
- c. All wastewater and recycled water storage facilities, with the exception of irrigation areas and the La Costa Golf Course storage pond, shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour frequency storm.

8. MONITORING AND REPORTING

The LWD shall comply with the attached Monitoring and Reporting Program No. R9-2004-0223, and future revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. R9-2004-0223.

9. MAINTENANCE

A preventive maintenance program shall be provided at the FRGWRP reclamation plant to ensure that all equipment is kept in a reliable operating condition.

10. RELIABILITY REQUIREMENTS

The LWD's facilities shall comply with all applicable reliability requirements contained in Title 22, Division 4, Chapter 3, Article 10, *Alternative Reliability Requirements for Uses Requiring Oxidized Disinfected Wastewater or Oxidized, Coagulated, Clarified, Filtered, Disinfected*

Wastewater, of the California Code of Regulations.

E. BIOSOLIDS SPECIFICATIONS

1. Collected screenings, sludges, other solids removed from liquid wastes, and filter backwash shall be disposed of in a manner approved by the Executive Officer. Before sludge is disposed of by means other than discharge to the EWPCF or a landfill regulated under waste discharge requirements, the discharge shall submit written notification to the Executive Officer of the proposed disposal method. Such disposal, use or supply for reuse by others shall not be initiated until approved by the Executive Officer.
2. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
3. The solids and sludge treatment site and storage site shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.
4. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.

F. STANDARD PROVISIONS

1. ENFORCEMENT

The Regional Board may initiate enforcement action against the LWD, which may result in the termination of the recycled water supply, if any person uses, transports, or stores such water in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in the California Water Code, Section 13050.

2. DUTY TO COMPLY

The LWD must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised master reclamation permit requirements.

3. ENTRY AND INSPECTION

The LWD shall allow the Regional Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to do the following:

- a. Enter upon the LWD's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Order,
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order,
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this Order, and
- d. Sample or monitor, at reasonable times for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

4. CIVIL MONETARY REMEDIES

The California Water Code provides that any person who intentionally or negligently violates any master reclamation permit requirements issued, reissued, or amended by this Regional Board shall be liable civilly in accordance with California Water Code.

5. PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION VIOLATIONS

The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is

guilty of a misdemeanor and is subject to a civil liability for each day in which the violation occurs.

6. ENDANGERMENT OF HEALTH AND ENVIRONMENT

The LWD shall report any noncompliance that may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the LWD becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the LWD becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours:

- a. Any bypass from any portion of the treatment facility that will result in noncompliance with any of the terms and conditions of this Order. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility to other than a sewer system.
- b. Any discharge of non-disinfected effluent or untreated wastewater that may endanger public health, or is greater than 1,000 gallons, or reaches surface waters.
- c. Any treatment plant upset which causes the effluent limitations of this Order to be exceeded including, but not limited to, the following:
 - (1) Failure of chlorination equipment
 - (2) Effluent total coliform bacteria greater than 240 MPN/100 ml
 - (3) Turbidity greater than 10 NTU if distributed to any recycled water user
 - (4) CT less than 450 mg-min/L if distributed to any recycled water user

These incidents shall also be reported orally to the State DHS and County DEH within 24-hours of the incident.

7. PLANT OVERFLOW EVENTS

The discharger shall report all overflow events that occur at the FRGWRP. For purposes of this reporting requirement, an overflow event is defined as a discharge of treated or untreated wastewater not authorized by waste discharge requirements and/or a NPDES permit which results from a pump station failure, line break, obstruction, surcharge, or any other operational dysfunction. This reporting requirement applies to all overflow events other than: 1) events required to be reported under Standard Provision 6 above, and 2) those events subject to regulation under this Regional Board's Order No. 96-04, *General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies*. Overflows identified under this provision shall be reported to the Regional Board with the quarterly monitoring report for the period in which the overflow occurs.

8. UNAUTHORIZED DISCHARGES OF RECYCLED WATER

Any person who, without regard to intent or negligence, causes or permits an unauthorized discharge of 50,000 gallons or more of recycled water that has been treated to at least disinfected tertiary 2.2 recycled water or 1,000 gallons or more of recycled water that is treated at a level less than disinfected tertiary 2.2 recycled water in or on any waters of the state, or causes or permits such unauthorized discharge to be discharged where it is, or probably will be, discharged in or on any waters of the state, shall, as soon as (1) that person has knowledge of the discharge, (2) notification is possible, and (3) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify this Regional Board in accordance with reporting requirements in Standard Provision F.6.

9. PRIOR NOTICE OF BYPASS

If a need for a discharge bypass is known in advance, the LWD shall submit prior notice (stating, at a minimum, the purpose, anticipated dates, duration, level of treatment, and volume of bypass) and, if at all possible, shall submit such notice at least 10 days prior to the date of the bypass. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility to other than a sewer system.

10. CORRECTIVE ACTION

The LWD shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

11. TREATMENT FAILURE

In an enforcement action, it shall not be a defense for the LWD that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the LWD shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility is failed, reduced, or lost.

12. HAZARDOUS RELEASES

Except for a discharge which is in compliance with these master reclamation permit requirements, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Director of County DEH in accordance with California Health and Safety Code Section 5411.5 and the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with Section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the State Board or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Section 13271 of the Water Code unless the LWD is in violation of a prohibition in the applicable Water Quality Control Plan.

13. PETROLEUM RELEASES

Except for a discharge which is in compliance with these master reclamation permit requirements, any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with Section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Section 311 of the Clean Water Act or the discharge is in violation of a prohibition in the applicable Water Quality Control Plan.

14. PERMIT REPOSITORY

A copy of this Order shall be maintained at the LWD's facility and shall be available to operating personnel at all times.

15. RETENTION OF RECORDS

The LWD shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

16. GENERAL REPORTING REQUIREMENT

The LWD shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The LWD shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

17. PERMIT REVISION

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this Order.
- b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the LWD for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

18. CHANGE IN DISCHARGE

The LWD shall file a new Report of Waste Discharge at least 120 days prior to the following:

- a. Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste.)
- b. Change in the disposal area from that described in the findings of this Order.
- c. Increase in flow beyond that specified in this Order.
- d. Other circumstances that result in a material change in character, amount, or location of the waste discharge.
- e. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

19. CHANGE IN OWNERSHIP

This Order is not transferable to any person except after notice to the Executive Officer. The LWD shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the LWD and the new discharger. This agreement shall include an acknowledgement that the LWD is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on. The

Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code.

20. INCOMPLETE REPORTS

Where the LWD becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.

21. REPORT DECLARATION

All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:

- a. The Report of Waste Discharge shall be signed as follows:
 - (1) For a corporation - by a principal executive officer of at least the level of vice-president.
 - (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
 - (3) For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
- b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if all of the following are true:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this provision,
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, and
 - (3) The written authorization is submitted to the Executive Officer.

- c. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

22. REGIONAL BOARD ADDRESS

The LWD shall submit reports required under this Order or other information required by the Executive Officer to the following address:

POTW Compliance Unit
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123

G. SPECIAL PROVISIONS

1. Within 180 days from the adoption of this Order, the LWD shall submit a supplement to the Engineering Report for the FRGWRP, in accordance with guidelines established under Title 22 CCR, Articles 7 through 10, to the RWQCB and the DHS. This report shall include the results of:
 - a. An alarm simulation shut down test to ensure that the FRGWRP is properly operating.
 - b. The modal contact time of the chlorination chamber, as defined under Title 22, Division 4, Chapter 3, Section 60301.600, from a tracer study conducted to ensure that the effluent meets the requirements of Title 22.

H. NOTIFICATIONS

1. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the LWD from liability under federal, state or local laws, nor create a vested right for the LWD to continue the waste discharge.

2. U.S. EPA REVIEW

These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.

3. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

4. PREVIOUS ORDER

The requirements prescribed in this Order supersede the requirements prescribed in Order No. 93-41.

5. EFFECTIVE DATE

This Order becomes effective on the date of adoption by the San Diego RWQCB.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on September 8, 2004.



JOHN H. ROBERTUS
Executive Officer

ATTACHMENT NO. 1

1994 WATER QUALITY CONTROL PLAN FOR THE SAN DIEGO BASIN (BASIN PLAN) WASTE DISCHARGE PROHIBITIONS

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person as defined by Section 13050(c) of the California Water Code and to any person who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.
2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264, is prohibited.
3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in California Water Code §13376) is prohibited
4. The discharge of treated or untreated waste to lakes or reservoirs used for municipal water supply, or to inland surface water tributaries thereto, is prohibited.
5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the Regional Board.
7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.
8. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the Regional Board. (The

federal regulations, 40CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharge resulting from fire fighting activities.) (§122.26 amended at 56 FR 56553, November 5, 1991 57 FR 11412, April 2, 1992).

9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.
10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.
11. The discharge of radioactive waste amenable to alternative methods of disposal into the waters of the state is prohibited.
12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.
13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.
14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.
16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.
17. The discharge of treated sewage from vessels to portion of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.
18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep a mean lower low water (MLLW) is prohibited.

ATTACHMENT NO. 2
RULES AND REGULATIONS FOR RECYCLED WATER USE PROJECTS

Pursuant to California Water Code (CWC) Section 13523.1(b)(3), this Order requires the Recycled Water Agency to establish and to enforce rules and regulations governing the design, construction and use of recycled water distribution and disposal systems by its customers. The rules and regulations shall be consistent with the following criteria:

- Title 22, Division 4, Chapter 3, *Wastewater Reclamation Criteria*;
- Title 17, Division 1, Chapter 5, Group 4, Article 1 & 2, of the California Code of Regulations;
- The State Department of Health Services (State DHS) *Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water*;
- Any measures that are deemed necessary for protection of public health, such as the American Water Works Association (AWWA) California/Nevada section, *Guidelines for the Distribution of Non-Potable Water and Guidelines for Retrofitting To Recycled Water* or alternate measures that are acceptable to the State DHS.

At a minimum, the rules and regulations shall notify the users that:

1. The use of recycled water shall not cause pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code.
2. The Recycled Water Agency, Regional Board, State DHS, County DEH or an authorized representative of these parties, upon presentation of proper credentials, shall have the right to enter upon the recycled water use site during reasonable hours, to verify that the user is complying with the Recycled Water Agency's rules and regulations.
3. The recycled water user shall provide written notification, in a timely manner, to the Recycled Water Agency of any material change or proposed change in the character of the use of recycled water.
4. Prior to the initiation of recycled water service, the recycled water user shall submit plans and specifications for recycled water distribution facilities to the Recycled Water Agency.
5. The recycled water user shall designate a recycled water supervisor who is responsible for the recycled water system at each use area under the user's control. Specific responsibilities of the recycled water supervisor include the

- proper installation, operation, and maintenance of the irrigation system; compliance of the project with the Recycled Water Agency's rules and regulations, prevention of potential hazards and preservation of the recycled water distribution system plans in "as built" form.
6. The Recycled Water Agency may terminate service to a recycled water user who uses, transports, or stores such water in violation of the Recycled Water Agency's rules and regulations.
 7. The Regional Board may initiate enforcement action against any recycled water user, including but not limited to the termination of the recycled water supply, who:
 - a. Discharges recycled water in violation of any applicable discharge requirement prescribed by the Regional Board or in a manner which creates or threatens to create conditions of pollution, contamination, or nuisance, as defined in the California Water Code Section 13050.
 - b. Uses, transports, or stores such water in violation of the rules and regulations governing the design, construction and use of recycled water distribution and disposal systems issued by the recycled water agency in accordance with this attachment; or in a manner which creates or threatens to create conditions of pollution, contamination, or nuisance, as defined in the California Water Code Section 13050.
 8. A copy of the recycled water rules and regulations, irrigation system layout map, and a recycled water system operations manual shall be maintained at the use area. These documents shall be available to operating personnel at all times.
 9. Irrigation with disinfected tertiary recycled water shall not take place within 50 feet of any domestic water supply well unless all of the following conditions have been met:
 - a. A geological investigation demonstrates that an aquitard exists at the well between the uppermost aquifer being drawn from and the ground surface.
 - b. The well contains an annular seal that extends from the surface into the aquitard.
 - c. The well is housed to prevent any recycled water spray from coming into contact with the wellhead facilities.
 - d. The ground surface immediately around the wellhead is contoured to

- allow surface water to drain away from the well.
- e. The owner of the well approves of the elimination of the buffer zone requirement.
10. Impoundment of disinfected tertiary recycled water shall not occur within 100 feet of any domestic water supply well.
 11. Irrigation with, or impoundment of, disinfected secondary-2.2 or disinfected secondary-23 recycled water shall not take place within 100 feet of any domestic water supply well.
 12. Irrigation with, or impoundment of, undisinfected secondary recycled water shall not take place within 150 feet of any domestic water supply well.
 13. Recycled water facilities shall be operated in accordance with best management practices (BMP's) to prevent public contact with, and prevent direct human consumption of reclaimed water. All windblown spray of reclaimed water applied for irrigation onto property not owned or controlled by the discharger or reclaimed water user shall be prevented by the implementation of BMP's.
 14. Facilities that may be used by the public shall be protected to the maximum extent possible by siting and/or structure from contact by irrigation with recycled water spray, mist, or runoff. Protection shall be by design, construction practice or system operation.
 15. Any use of recycled water shall comply with the following:
 - a. Any irrigation runoff shall be confined to the recycled water use area.
 - b. Spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.
 - c. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
 16. Irrigation with reclaimed water shall be during periods of minimal human use of the service area. Consideration shall be given to allow an adequate dry-out time before the irrigated area will be used by the public.
 17. Spray irrigation with recycled water, other than disinfected tertiary recycled water, shall not take place within 100 feet of the property line of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.

18. All use areas where recycled water is used and that are accessible to the public shall be posted with conspicuous signs, in a size no less than 4 inches by 8 inches, that include the following wording and picture in a size no less than 4 inches high by 8 inches wide: "RECYCLED WATER - DO NOT DRINK". See Attachment No. 3 for the acceptable symbol. The sign(s) shall be of a size easily readable by the public. The prescribed wording should also be translated into Spanish and other appropriate languages and included in the required signs.
19. Except as allowed under Section 7604 of Title 17, California Code of Regulations, no physical connection shall be made or allowed to exist between any recycled water system and any separate system conveying potable water.
20. The recycled water piping system shall not include any hose bibs. Quick couplers that are different from that used on the potable water system may be used.
21. The public water supply shall not be used as a backup or supplemental source of water for a recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of Sections 7602(a) and 7603(a) of Title 17 and the approval of the public water system has been obtained. If a "Swivel-ell" type connection is used it must be used in accordance with the provisions of the Department of Health Services Policy Memo 95-004. Approved backflow prevention devices shall be provided, installed, tested, and maintained by the recycled water user in accordance with the applicable provisions of Title 17, Division 1, Chapter 5, Group 4, Article 2.
22. No person other than the Recycled Water Agency shall deliver recycled water to a facility. Connection to the irrigation system by an individual residence is prohibited.
23. All recycled water piping and appurtenances in new installations and appurtenances in retrofit installations shall be colored purple or distinctively wrapped with purple tape in accordance with Chapter 7.9, Section 4049.54 of the California Health and Safety Code.
24. Customer complaints concerning recycled water use that may involve public illness shall be reported to the County DEH and the State DHS, and to the Recycled Water Agency who shall maintain a log of all customer complaints regarding recycled water.
25. All reclaimed water storage facilities owned and/or operated by the Recycled Water Agency shall be protected against erosion, overland runoff, and other

impacts resulting from a 100-year frequency storm, 24 hour storm.

26. All reclaimed water storage facilities owned and/or operated by the Recycled Water Agency shall be protected against 100-year frequency peak stream flows as defined by the local flood control agency.
27. Any backflow prevention device installed to protect the public water system shall be inspected and maintained in accordance with Section 7605 of Title 17.

ATTACHMENT NO. 3



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

MONITORING AND REPORTING PROGRAM NO. R9-2004-0223

**FOR
LEUCADIA WASTEWATER DISTRICT
FOREST R. GAFNER WATER RECLAMATION PLANT
SAN DIEGO COUNTY**

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Monitoring and Reporting Program (M&RP) and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.
2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +10 percent from true discharge rates throughout the range of expected discharge volumes.
3. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this M&RP.
4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.
5. Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.
6. If the Leucadia Wastewater District (discharger) monitors any pollutants more frequently than required by this M&RP, using test procedures

approved under 40 CFR, Part 136, or as specified in this M&RP, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this M&RP, and records of all data used to complete the application for this M&RP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.
8. Records of monitoring information shall include the following:
 - a. The date, exact place, and time of sampling or measurements,
 - b. The individual(s) who performed the sampling or measurements,
 - c. The date(s) analyses were performed,
 - d. The individual(s) who performed the analyses,
 - e. The analytical techniques or method used, and
 - f. The results of such analyses.
9. All monitoring instruments and devices that are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
10. The discharger shall report all instances of noncompliance not reported under Provision F.6 of Order No. R9-2004-0223 at the time monitoring reports are submitted. The reports shall contain the information described in Provision F.6.
11. The monitoring reports shall be signed by an authorized person as required by Provision F.21.
12. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquot must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the

collection of the previous aliquot. Aliquot may be collected manually or automatically.

13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
14. Sampling and analysis shall, at a minimum, be conducted in accordance with Article 6 of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria).
15. Any known direct cross-connection between recycled and potable water shall be reported to the Regional Board, State DHS, and County DEH within 24 hours.

B. EFFLUENT MONITORING

1. Samples of the effluent discharged from the Forest R. Gafner Water Reclamation Plant (FRGWRP) shall be collected at a point at or nearest to the effluent pump station, downstream of the disinfection process and prior to any dilution.
2. The discharger is responsible for monitoring and reporting in accordance with the following criteria:

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flowrate ¹	MGD	Continuous	Continuous	Quarterly
Turbidity	NTU	Continuous	Continuous ²	Quarterly
Chlorine Contact Time (CT)	mg-min/L	Calculated	Continuous ³	Quarterly
Chlorine Residual	mg/L	Continuous	Continuous ⁴	Quarterly
Total Coliform	MPN/100ml	Grab	Daily ⁵	Quarterly
Total Dissolved Solids	mg/L	Composite	Quarterly	Quarterly
Electroconductivity ⁶	dS/m	Composite	Quarterly	Quarterly
pH	Unit	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Composite	Quarterly	Quarterly
Total Phosphorus	mg/L	Composite	Quarterly	Quarterly
Chloride	mg/L	Composite	Annually	Annually

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Sulfate	mg/L	Composite	Annually	Annually
Adjusted Sodium Adsorption Ratio ⁷	---	Composite	Annually	Annually
Iron	mg/L	Composite	Annually	Annually
Manganese	mg/L	Composite	Annually	Annually
Methylene Blue Active Substances	mg/L	Composite	Annually	Annually
Boron	mg/L	Composite	Annually	Annually
Fluoride	mg/L	Composite	Annually	Annually
Aluminum	mg/L	Composite	Annually	Annually
Antimony	mg/L	Composite	Annually	Annually
Arsenic	mg/L	Composite	Annually	Annually
Barium	mg/L	Composite	Annually	Annually
Beryllium	mg/L	Composite	Annually	Annually
Cadmium	mg/L	Composite	Annually	Annually
Chromium	mg/L	Composite	Annually	Annually
Copper	mg/L	Composite	Annually	Annually
Cyanide	mg/L	Composite	Annually	Annually
Mercury	mg/L	Composite	Annually	Annually
Nickel	mg/L	Composite	Annually	Annually
Selenium	mg/L	Composite	Annually	Annually
Thallium	mg/L	Composite	Annually	Annually

Notes: MGD = Million gallons per day
 MPN/100 ml = Most Probable Number per 100 milliliters
 mg-min/L = milligrams-minutes per liter
 mg/L = milligrams per liter
 NTU = Nephelometric Turbidity Units
 dS/m = deciseimens per meter

- 1 Report both the daily average and daily maximum.
- 2 Effluent turbidity analyses shall be conducted continuously using a continuous monitoring and recording turbidimeter. Compliance with the daily average operating filter effluent turbidity limit of 2 NTU shall be determined by averaging the recorded turbidity levels at a minimum of four-hour intervals over a 24-hour period. Compliance with the turbidity standard of not exceeding 5 NTU more than 5 percent of the time over a 24-hour period shall be determined

using the levels of recorded turbidity taken at intervals of no more than 1.2 hours over a 24-hour period. Should the continuous turbidity meter and/or recorder fail, grab sampling at a minimum frequency of one sample every 1.2 hours may be substituted until the turbidity meter and/or recorder is fixed. The discharger shall report the daily average effluent turbidity, the daily duration that turbidity exceeds 5 NTU, and the daily maximum turbidity (daily being defined as the 24-hour period from 12 am to 12 am). Continuous turbidity monitoring must also be provided prior to filtration to ensure adequate process control, and automatic actuate coagulant feed when the turbidity of the secondary treated effluent is greater than 10 NTU.

- 3 Calculated CT (chlorine concentration multiplied by modal contact time) values shall be determined and recorded continuously. The discharger shall report the daily minimum CT value and daily minimum modal contact time. The discharger shall report the date(s), value(s), time, and duration when the CT value falls below 450 mg-min/L, and/or the modal contact time falls below 90 minutes.
- 4 Chlorine concentrations shall be recorded by a continuous recording meter. The discharger shall report the minimum daily chlorine residual.
- 5 Samples for total coliform bacteria shall be collected at least daily and at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures. The discharger shall report the results of daily total coliform bacteria monitoring and running 7-day median determination.
- 6 Samples for electroconductivity shall be monitored concurrently with ASAR.
- 7 The adjusted sodium adsorption ratio (Adj. SAR) is calculated as follows:

$$\text{Adj. SAR} = \frac{Na}{\sqrt{(Ca_x + Mg)/2}}$$

where Na, Ca_x, and Mg are in milliequivalent per liter (meq/L). Ca_x is a modified Ca value calculated using Table 3-2 contained in *Irrigation with Reclaimed Municipal Wastewater, A Guidance Manual*.

3. The discharger shall review the monitoring results for compliance with Order No. R9-2004-0223 and submit a statement of compliance as part of this Monitoring and Reporting Program. The statement of compliance shall identify and report all violations of effluent limitations or disinfection requirements of Order No. R9-2004-0223.

C. SAN MARCOS CREEK

1. The discharger shall monitor San Marcos Creek at the following stations:
 - a. a station located upstream of the La Costa Golf Course;
 - b. a station located downstream of the La Costa Golf Course after the confluence of the north fork of San Marcos Creek;
 - c. a station located where a discharge into or from the La Costa Golf Course reclaimed water storage pond would first contact San Marcos Creek during an overflow or flood event.

2. The discharger shall monitor the stations within San Marcos Creek according to the following table:

CONSTITUENT	UNIT	TYPE OF SAMPLE	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flowrate	Gallons/Day	Estimate ¹	Quarterly ²	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly ²	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly ²	Quarterly
Total Phosphorous	mg/L	Grab	Quarterly ²	Quarterly
Methylene Blue Active Substances	mg/L	Grab	Quarterly ²	Quarterly
Total Coliform	MPN/100ml	Grab	Quarterly ²	Quarterly

- Notes: 1. Calculate from estimate of creek cross sectional area and velocity.
2. If there is an overflow or flood event causing water contact between the La Costa Golf Course reclaimed water storage pond and San Marcos Creek the discharger shall begin monitoring on the first day of the overflow or flood event and continue monitoring daily until contact between the reclaimed water storage pond and San Marcos Creek has been terminated.

D. FILTRATION PROCESS MONITORING

If coagulation is not used as part of the treatment process, the turbidity of the filter influent and effluent shall be continuously measured. If effluent turbidity exceeds 2 NTU based on a 24-hour average, or if the influent turbidity exceeds 5 NTU for more than 15 minutes or 10 NTU at any time, then discharger shall submit a written report of the incident as part of the monthly monitoring report to the Regional Board. The report shall describe the measures taken to automatically activate chemical addition or to divert wastewater.

E. SEWAGE SOLIDS AND BIOSOLIDS

If solids are disposed of by means other than discharge to the Encina Water Pollution Control Facility, a record of the type, quantity, and manner of disposal and/or reuse of all solids removed in the course of sewage treatment shall be maintained at the FRGWRP and be made available to Regional Board staff upon request.

F. RECYCLED WATER USERS SUMMARY REPORT

1. If the LWD is supplying reclaimed water directly to parties other than itself (for onsite use only) or the Carlsbad Municipal Water District (CMWD), the

LWD shall submit a quarterly recycled water users summary report containing the following information:

- a. Total volume of recycled water supplied to all recycled water users for each month of the reporting period,
 - b. Total number of recycled water use sites,
 - c. Address of the recycled water use sites and
 - d. Basin Plan name and number of hydrologic subarea underlying the recycled water use site.
2. If the LWD is supplying reclaimed water directly to parties other than itself (for onsite use only) or the Carlsbad Municipal Water District (CMWD), the LWD shall submit an annual recycled water users compliance report containing the following information:
- a. Recycled water use site summary report
 - (1) Name of the reclaimed water reuse site
 - (2) Owner of the reclaimed water use facility
 - (3) Address of the reuse site
 - (4) Name of the reclaimed water user supervisor
 - (5) Phone number of the on-site water user supervisor
 - (6) Mailing address of the recycled water use supervisor, if different from site address
 - (7) Volume of reclaimed water delivered to the reuse site on a monthly basis
 - b. Recycled water user site inspections

Number of reclaimed water reuse site inspections conducted by discharger/producer staff and identification of sites inspected for the year.
 - c. Recycled water user violations of the LWD's rules and regulations

The discharger shall identify all recycled water users known to be in violation of the LWD's rules and regulations for recycled water users. The report shall include a description of the noncompliance and its cause, including the period of noncompliance, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

G. REPORT SCHEDULE

Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

<u>Reporting Frequency</u>	<u>Report Period</u>	<u>Report Due</u>
Quarterly	January - March April - June July - September October - December	May 1 st August 1 st , November 1 st February 1 st
Annually	January-December	February 1 st

Monitoring reports shall be submitted to:

ATTN: POTW Compliance Unit
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Ordered by: 
JOHN H. ROBERTUS
Executive Officer

Date: September 8, 2004